

Claims:

1. Diverter switch in particular for branching off bulk-material flows, having a rotary plug (1) which is  
5 arranged in a stationary housing (2) preferably comprising three connecting openings (4, 5, 6) and which, in a first position, realizes a connection of a first connecting-opening pair (4, 5) and, by rotation into a second position, realizes a connection of a  
10 second connecting-opening pair (4, 6), a gap (10) for the non-contact arrangement of the rotary plug (1) in the housing (2) without an additional contact sealing element being provided between the rotary plug (1) and the housing (2), characterized in that the rotary plug  
15 (1) and/or the housing (2) has at least one labyrinth seal arrangement (7).
2. Diverter switch according to Claim 1, characterized in that the labyrinth seal arrangement  
20 (7) comprises at least one labyrinth seal groove (8, 9).
3. Diverter switch according to either of the preceding claims, characterized in that a plurality of  
25 labyrinth seal grooves (8, 9) arranged next to one another are provided.
4. Diverter switch according to one of the preceding claims, characterized in that the labyrinth seal groove  
30 (8) of the rotary plug (1) is arranged largely continuously around at least one opening of a through-channel (3), a cylindrical rotary plug (1) preferably being provided.
- 35 5. Diverter switch according to one of the preceding claims, characterized in that the labyrinth seal groove (9) of the housing (2) is arranged largely continuously around at least one of the connecting openings (4, 5,

6), a cylindrical housing (2) preferably being provided.

5 6. Diverter switch according to one of the preceding claims, characterized in that at least one feed opening (12) of a feed channel for feeding a gap fluid into the gap (10) between rotary plug (1) and housing (2) is provided.

10 7. Diverter switch according to one of the preceding claims, characterized in that the labyrinth seal groove (8, 9) has the feed opening (12).

15 8. Diverter switch according to one of the preceding claims, characterized in that a pressure of the gap fluid is greater than a pressure of the conveying fluid.

20 9. Diverter switch according to one of the preceding claims, characterized in that a composition of the gap fluid essentially corresponds to a composition of the conveying fluid.

25 10. Diverter switch according to one of the preceding claims, characterized in that a maximum width (W) of the gap (10) is smaller than or equal to five-tenths of a millimetre ( $W \leq 5/10$  mm) and is preferably smaller than or equal to three-tenths of a millimetre ( $W \leq 3/10$  mm).